L14 ANSWER 2 OF 4 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
AN 2003-15163 BIOTECHDS
TI **Pseudomonas** sp. WAK-1 produced sulfated **polysaccharides** for use in antitumor agents for treating e.g. breast cancer, melanoma, ovarian cancer, stomach cancer and **prostate cancer**; **polysaccharide** preparation by bacterium fermentation for disease therapy
AU OKUTANI K; MATSUDA M
PA TECHNO NETWORK SHIKOKU CO LTD
PI WO 2003023045 20 Mar 2003
AI WO 2002-JP9094 6 Sep 2002
PRAI JP 2001-270284 6 Sep 2001; JP 2001-270284 6 Sep 2001
DT Patent
LA Japanese
OS WPI: 2003-381447 [36]
AB DERWENT ABSTRACT:
NOVELTY - Sulfated **polysaccharides** comprising a structural unit (I) and their pharmaceutically-acceptable salts, are new.

DETAILED DESCRIPTION - Sulfated **polysaccharides** comprise a structural unit of formula (I). Galp = galactopyranose residue Glcp = glucopyranose residue. INDEPENDENT CLAIMS are also included for: (1) producing the sulfated **polysaccharides** or their pharmaceutically-acceptable salts by culturing **Pseudomonas** sp. WAK-1 in a nutrient source-containing medium after inoculation, and collecting the product from the cultured material; (2) substances formulated from the sulfated **polysaccharides** or their pharmaceutically-acceptable salts as active ingredient to effect changes in the function of cells sensitive to their physiological activities; and (3) the use of sulfated **polysaccharides** to effect changes in the function of cells sensitive to their physiological activities.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - None given. No suitable data given.

USE - The produced **polysaccharides**, with anticancer activity, are for use in antitumor agents for treating e.g. breast cancer, melanoma, ovarian cancer, stomach cancer and **prostate cancer**.

ADMINISTRATION - Administration is oral or non-oral, e.g. at 0.01 mg to 1 g by i.v.

ADVANTAGE - Such compounds are obtainable in large quantities, which is highly safe, with acute toxicity of 5 g/kg.

EXAMPLE - **Pseudomonas** sp. WAK-1 was cultured in a medium containing 0.5% peptone and 0.1% yeast extract, at 28 degrees C for 72 hours with agitation. After work-up and ion-exchange chromatographic purification on DEAE cellulose column, 53 mg of sulfated **polysaccharides** was obtained (from 500 ml fermentation liquor): characterization by polarimetry, NMR and GC-MS. Antitumor activity of the sulfated **polysaccharides** was confirmed (e.g. against breast cancer HBC-4).(41 pages)